

### **Abstract of the Invention**

A system for performing inventory control for wafers, unpackaged integrated circuits and packaged integrated circuits is provided. The system includes barcode readers, sorters and transporters operable to locate and relocate wafers, unpackaged  
5 circuits and packaged circuits. The system further includes a feedback system for feeding back information generated by the barcode readers, sorters, transporters and/or manufacturing devices associated with the wafers, unpackaged circuits and packaged circuits. The system further provides for generating Electronic Data Interchange (EDI) data that can be transmitted to wafer suppliers and employed in controlling wafer  
10 ordering, purchasing, processing and returning.